

NOTICE OF VIOLATION  
AND  
PROPOSED IMPOSITION OF CIVIL PENALTY

Arizona Public Service Company  
Palo Verde Nuclear Generating Station

Docket Nos.: 50-528; 50-529; 50-530  
License Nos.: NPF-41; NPF-51; NPF-74  
EA 98-382

During an NRC inspection conducted May 26 through July 21, 1998, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the NRC proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

- A. Technical Specification 3.5.2 requires, in part, that in Modes 1, 2, and 3, two independent emergency core cooling system (ECCS) subsystems be operable with each subsystem comprised of one operable high pressure safety injection (HPSI) pump, one operable low pressure safety injection pump, and an independent operable flow path. The action statement requires that with one ECCS subsystem inoperable, restore the inoperable subsystem to operable status within 72 hours or be in at least hot standby within the next 6 hours and in hot shutdown within the following 6 hours.

Technical Specification 3.0.3 requires, in part, that when a Limiting Condition for Operation is not met, except as provided in the associated action requirements, within 1 hour, action shall be initiated to place the unit in a Mode in which the specification does not apply by placing it, as applicable, in at least hot standby within the next 6 hours, and at least cold shutdown within the following 30 hours.

Contrary to the above:

1. Between May 1, 1992, and May 15, 1998, while Unit 1 was in Mode 1, the Train "B" ECCS subsystem was inoperable because it did not have an independent operable flow path, due to the inoperability of Valve 1PSIA-V404, and action was not taken to either restore the subsystem to operable status within 72 hours or to place the unit in hot standby within the next 6 hours and in hot shutdown within the following 6 hours.
2. Between April 14, 1993, and May 16, 1998, while Unit 2 was in Mode 1, the Train "A" ECCS subsystem was inoperable because it did not have an independent operable flow path, due to the inoperability of Valve 2PSIB-V405, and action was not taken to either restore the subsystem to operable status within 72 hours or to place the unit in hot standby within the next 6 hours and in hot shutdown within the following 6 hours.
3. Between October, 1992, and April 1994, while Unit 3 was in Mode 1, the Train "B" ECCS subsystem was inoperable because it did not have an independent operable flow path, due to the inoperability of Valve 3PSIA-V404, and action was not taken to either restore the subsystem to operable status

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within 72 hours or to place the unit in hot standby within the next 6 hours and in hot shutdown within the following 6 hours.

4. On September 4, 1996, while Unit 1 was in Mode 1, both independent ECCS subsystems were inoperable in that the Train "A" HPSI system was out-of-service for maintenance, Valve 1PSIA-V404 was inoperable, and Train "B" was not isolated from Train "A". With both flow paths inoperable, the licensee failed to take action within 1 hour, to place Unit 1 in a Mode in which Technical Specification 3.5.2 does not apply.
5. On October 21, 1994, while Unit 2 was in Mode 1, both independent ECCS subsystems were inoperable in that the Train "B" HPSI system was out-of-service for maintenance, Valve 2PSIB-V405 was inoperable, and Train "A" was not isolated from Train "B". With both flow paths inoperable, the licensee failed to take action within 1 hour, to place Unit 1 in a Mode in which Technical Specification 3.5.2 does not apply. (01013)

- B. 10 CFR Part 50, Appendix B, Criterion XVI, requires, in part, that measures shall be established to assure that conditions adverse to quality such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

Contrary to the above:

1. A cocked open HPSI pump discharge check valve caused unexpected draindowns of a Unit 2 safety injection tank on October 10 and 28, 1997. The cause of this significant condition adverse to quality was not promptly identified and corrected, nor were corrective actions taken to preclude repetition until May 16, 1998.
2. The misalignment of the internals of Valve 1PSIA-V404 was not promptly corrected in that it was improperly reassembled on April 9, 1998, which resulted in the potential for excessive reverse flow through this HPSI pump discharge check valve. This significant condition adverse to quality was not identified and corrected until May 15, 1998. (01023)

- C. 10 CFR Part 50, Appendix B, Criterion V, requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances, and that the instructions, procedures, or drawings include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Contrary to the above:

1. During the period of July 26, 1992, through April 11, 1998, Procedures 73ST-9XI29, "Section XI Check Valve Operability Verification - Mode 6 - Full Stroke



Testing of Safety Injection Check Valves," and 73ST-9XI33, "HPSI Pump and Check Valve Full Flow Test," failed to include appropriate quantitative or qualitative acceptance criteria to determine that the check valves would close satisfactorily during reverse flow condition. Because of the lack of appropriate acceptance criteria, the licensee failed to identify that Valves 1PSIA-V404, 2PSIB-V405, and 3PSIA-V404, would not close properly during reverse flow conditions for approximately 6 years, 5 years, and 1½ years respectively.

2. During the period of November 30, 1992, through November 17, 1994, Procedure 31MT-9ZZ17, "Disassembly and Reassembly of Borg-Warner Check Valves," was not appropriate to the circumstances in that the procedure did not ensure correct vertical alignment and resulted in the disk assemblies of Valves 1PSIA-V404, 2PSIB-V405, and 3PSIA-V404 being incorrectly positioned in the body of the valve. The incorrect disk positioning caused improper seating of the valves during reverse flow conditions which resulted in the potential for excessive reverse flow through the valves. (01033)

These violations represent a Severity Level III problem (Supplement I).  
Civil Penalty - \$55,000<sup>1</sup>.

Pursuant to the provisions of 10 CFR 2.201, Arizona Public Service Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty proposed above in accordance with NUREG/BR-0254 and submit to the Director, Office of Enforcement, a statement indicating when and by what method payment was made, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

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<sup>1</sup>The civil penalty applies only to the portion of the violations which occurred in the last five years.



In requesting mitigation of the proposed penalty, the factors addressed in Section VI.B.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalty due which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

The response noted above (Reply to Notice of Violation, statement as to payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: James Lieberman, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryah Plaza Drive, Suite 400, Arlington, Texas 76011, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 21<sup>st</sup> day of December 1998

